



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/599,694

01/19/2007

Adam John Walker

051922-408167

2909

27148 7590 03/01/2012
POLSINELLI SHUGHART PC
700 W. 47TH STREET
SUITE 1000
KANSAS CITY, MO 64112-1802

EXAMINER

MC GINTY, DOUGLAS J

ART UNIT

PAPER NUMBER

1765

NOTIFICATION DATE

DELIVERY MODE

03/01/2012

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspt@polsinelli.com

Office Action Summary	Application No. 10/599,694	Applicant(s) WALKER, ADAM JOHN	
	Examiner DOUGLAS MC GINTY	Art Unit 1765	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 January 2012.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 5) ☒ Claim(s) 57,58 and 62-70 is/are pending in the application.
- 5a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) 57,58 and 62-70 is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Status of Prosecution

The rejection under 35 USC 103 over Rogier (US 2003/0232844) is withdrawn.

A new rejection is made under 35 USC 112, second paragraph.

A new rejection is made as provisional obviousness-type double patenting.

A new rejection is made under 35 USC 103 over Fuzesi (US 4,219,624).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 57 and 62-67 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 57 is a “method for using an ionic liquid” but does not recite a method step. MPEP 2173.05(q).

Notwithstanding this rejection, the claims are examined to the extent understood.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct

Art Unit: 1765

from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 57, 58, and 62-70 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 17 and 18 of copending Application No. 13/170,686 (See US 2011/0257433).

Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1, 17, and 18 of the other application read as follows:

1. An ionic liquid comprising an anion and a cation characterised in that the cation is a nitrogen-containing cation of the formula (I)



wherein:

R is a hydrocarbyl group optionally interrupted by one or more ether or thioether linkages, and optionally substituted with one or more substituents selected from nitrogen-containing functional groups, alkyl, alkenyl, alkoxy, hydroxy, carbonyl and carboxyl groups; or from thiol, alkythio, sulphonyl, thiocyanate, isothiocyanate, azido, hydrazino, halogen, boronate and silyl groups;

R' and R'', which may be the same or different, each represent H or a hydrocarbyl group optionally interrupted by one or more ether or thioether linkages, and optionally substituted with one or more substituents selected from nitrogen-containing functional groups, alkyl, alkenyl, alkoxy, hydroxy, carbonyl and carboxyl groups; or from thiol, alkythio, sulphonyl, thiocyanate, isothiocyanate, azido, hydrazino, halogen, boronate and silyl groups; and

any two or three of R, R' and R'' may be joined together with the N to form a cyclic group.

17. A method comprising using the ionic liquid of claim 1 as a solvent.
18. A method comprising using the ionic liquid of claim 1:
 - as a solvent for enzyme-catalysed reactions;
 - as a solvent for organic synthesis;
 - as a matrix in matrix-assisted laser desorption/ionisation (MALDI) mass spectrometry;
 - as a solvent for extraction;
 - in catalysis or liquefaction;
 - as a nuclear fuel reprocessing medium;
 - in fuel cell or electrochemical applications;
 - in pervaporation, drug delivery, lubrication, hydraulics, adhesives, sensors, biocides; or
 - in chromatographic media.

The above is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Rejection – 35 USC 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 57 and 62-67 are rejected under 35 U.S.C. 102(b) as being anticipated by Fuzesi (US 4,219,624).

Fuzesi teaches a composition containing dimethylethanolamine formate (N,N-dimethylethanolammonium formate) [8: Table III]. The composition is used for polymerization, a type of organic synthesis and catalysis) [Abstract].

Fuzesi does not expressly teach that the dimethylethanolamine formate is an ionic liquid.

Still, Fuzesi teaches the presence of dimethylethanolamine formate. The compound inherently has the characteristics of forming an ionic liquid and being a solvent. MPEP 2112.

Response to Arguments

The applicant's Amendment and Remarks filed January 19, 2012 have been carefully considered and found to be persuasive. However, new grounds of rejection have been set forth above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DOUGLAS MC GINTY whose telephone number is (571)272-1029. The examiner can normally be reached on M-F, 830-500.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1765

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DOUGLAS MC GINTY/
Primary Examiner, Art Unit 1765